

PLATE VII.

DESCRIPTIONS OF SOME EXOTIC SPECIES OF SAWFLIES.

THE family Tenthredinidæ is one of great extent, and is distinguished by the peculiar structure of the ovipositor, which is constructed so as to act like a pair of saws in forming channels in the bark of twigs and ribs of leaves, in which the eggs are deposited. The caterpillars are also remarkable as being the only Hymenopterous larvæ furnished with prolegs, thus resembling the caterpillars of the Lepidoptera. The insects figured on the opposite plate present some striking instances of departure from the general characteristics of the family or those particular groups to which they belong.

Figure 1 represents the female of *Perga Lewisii*, *Westw.* (Trans. Ent. Soc. 1. p. 234), a species discovered in Van Diemen's Land, by Mr. R. H. Lewis, who observed its singular economy. "The maternal solicitude of insects for their offspring," observes the writer, "has been seldom observed to extend beyond the various contrivances which instinct directs them to make at the time of the deposition of the egg, the female insect dying in most cases immediately after*." The female *Perga*, on the contrary, after depositing her eggs in a longitudinal incision between the two surfaces of the leaves of one of the gum trees (*Eucalyptus*), sits on the spot until the exclusion of her young, upon which, when hatched, she sits with outstretched legs, preserving them from the heat of the sun, and protecting them from the attacks of enemies, with admirable perseverance. From the various experiments with the insects and their broods, described by Mr. Lewis in his paper in the Transactions of the Entomological Society, it is quite evident that the female insect constantly watches over the young until death terminates her own existence.

HYLOTOMA (*Schizocera*) *australis*, W. (Plate 7, fig. 2.) Læte cyanea, ore maculisque duabus pone oculos fulvis; alis fascia lata pone medium fuscis; abdomine transverse striatulo, alis anticis et posticis cellula marginali appendiculata; tibiis posticis calcari medio instructis, pedibus nigris, tibiis tarsisque anticis anoque fulvis; antennis nigris. Long. corp. lin. 3.

Habitat in Australasia occidentali. D. Gould. In Mus. D. Hope.

This species differs from all the *Schizocerus* *Hylotomæ* described

* In social insects, the honey-bee, for example, the care of the young devolves upon a particular portion of the community allotted for that purpose (the neuters or workers), which are incapacitated by their structure from having any offspring of their own.

by Dr. Klug (Jahrbuch. d. Entom.) in the appendiculated marginal cells of the wings and the middle-spurred hind tibiæ. In these respects, the insect is a true *Hylotoma*, thus confirming Dr. Klug's union of *Schizocera* with *Hylotoma*.

PACHYLOTA, *Westw.* (Plate 7, fig. 3.)

Corpus breve crassum, capite magno quadrato plano. Ocellus medius parvus. Antennæ capite vix longiores 3-articulatæ, articulo 2ndo minuto, 3tio longo fere cylindrico. Clypeus transversus brevis in medio emarginatus. Labrum transversum breve, in medio emarginatum ciliatum; mandibulæ (fig. a) magnæ crassæ apice acutæ, extus curvatæ intus sub apicem rectæ, margine acuto. Maxillæ et labium membranaceæ parvæ, maxillæ (b in situ et b*) lobo apicali magno tenui apice dilatato et reflexo, lobo interno minuto attenuato. Palpi maxillares breves 4-articulati, articulo 1mo minuto intus appendiculo triangulari instructo; 4to magno ovato. Mentum (c) basi quadratum, supra dilatato-rotundatum gibbum, palpi labiales (c*) ad ejus angulos anticos inserti, brevissimi 4-articulati, articulis basalibus brevibus, 4to tamen tenui longiori. Labium e lobis tribus brevissimis formatum.

Alæ anticæ (fig. d) cellula unica marginali apice appendiculata, 4 submarginales, 1ma brevissima, 2da longiori venas duas recurrentes excipiente, 3tia parva, 4ta apicem alæ attingente, alæ posticæ cellula marginali haud appendiculata. Pedes breves crassissimi subdepressi, tibiis apice omnino ecalcaratis, tarsis omnibus dilatatis (e), articulis basalibus subtus lobo minuto instructis, unguibus minutis distantibus pulvilloque transverso brevissimo.

Obs. Characteres e femina desumpti.

This is one of the most anomalous forms yet described amongst the Tenthredinidæ. It is most nearly allied to *Hylotoma* in the antennæ and wings; but differs from that as well as from every yet known species in the family, in the remarkable structure of the dilated feet destitute of tibial spurs. The structure of the mouth is also equally unlike that of every known sawfly. In the Australian genus *Perga* we, however, met with 4-jointed maxillary palpi.

Pachyloa Audouinii, *Westw.* P. nigro-cyanea, capite antennis prothoracæ pedibusque anticis luteis; pedibus 4 posticis nigris; alis fuscis, anticis macula triangulari subcostali, apiceque maculaque ovata in cellula marginali posticarum pallidis; costa stigmatæque nigris. Long. corp. lin. 7. Expans. alar. lin. 15.

Habitat in Africa (tropicali?) In Mus. nostr.

I have great pleasure in dedicating this most interesting insect to my friend Professor Audouin, by whose kindness I received it from the Jardin des Plantes.

DICTYNNA, *Westw.* Plate 7, fig. 4.

Antennæ capite cum thoracæ breviores 9-articulatæ, articulo 3tio longiori, sequentibus sensim crassioribus; alæ anticæ cellula unica marginali magna, appendiculata, 4 submarginales, 2da et 3tia venam recurrentem recipiunt. Alæ posticæ cellula marginali appendiculata. Corpus breve robustum. Tibiæ 4 posticæ medio inermes.

This genus connects *Athalia* with *Hylotoma*. The species figured is, in fact, an *Athalia* with the wings of *Hylotoma*. Its beautiful colour is met with in no other species of the great section of the family which have multi-articulate antennæ.

Dictynna lata *W.* (Plate 7, fig. 4.) Viridis nitida, abdomine subsericea; antennis nigris; pedibus testaceis tarsorum apice (præsertim posticorum) fusco; alis fusco nonnihil tinctis; costa stigmatæque nigris. Long. corp. lin. 3½.

Habitat in Terra Van Diemenii. In Mus. nostr. Commun. D. Lewis, M. E. S.

The plant figured is the Australian *Eucalyptus robusta*, *Smith*.